

# Examiner Search Report

9/30/04

09/731,632

=> d his

(FILE 'HOME' ENTERED AT 10:48:03 ON 30 SEP 2004)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, AQUALINE, ANABSTR, ANTE, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DISSABS, DDFB, DDFU, DGENE, ...' ENTERED AT 10:48:16 ON 30 SEP 2004  
SEA CYCLOOXYGENASE OR COX

-----  
4273 FILE ADISCTI  
108 FILE ADISINSIGHT  
336 FILE ADISNEWS  
907 FILE AGRICOLA  
46 FILE AQUALINE  
91 FILE ANABSTR  
45 FILE ANTE  
487 FILE AQUASCI  
497 FILE BIOBUSINESS  
33 FILE BIOCOMMERCE  
264 FILE BIOENG  
40750 FILE BIOSIS  
201 FILE BIOTECHABS  
201 FILE BIOTECHDS  
6561 FILE BIOTECHNO  
4278 FILE CABA  
10632 FILE CANCERLIT  
28655 FILE CAPLUS  
128 FILE CEABA-VTB  
60 FILE CEN  
717 FILE CIN  
546 FILE CONFSCI  
12 FILE CROPB  
123 FILE CROPU  
2300 FILE DISSABS  
99 FILE DDFB  
9941 FILE DDFU  
2189 FILE DGENE  
99 FILE DRUGB  
325 FILE DRUGMONOG2  
255 FILE IMSDRUGNEWS  
12058 FILE DRUGU  
157 FILE IMSRESEARCH  
742 FILE EMBAL  
36343 FILE EMBASE  
16125 FILE ESBIOBASE  
1076 FILE FEDRIP  
95 FILE FOMAD  
279 FILE FROSTI  
530 FILE FSTA  
17034 FILE GENBANK  
240 FILE HEALSAFE  
2118 FILE IFIPAT  
89 FILE IMSPRODUCT  
3089 FILE JICST-EPLUS  
28 FILE KOSMET  
4509 FILE LIFESCI  
58 FILE MEDICNF  
39369 FILE MEDLINE  
133 FILE NIOSHTIC  
468 FILE NTIS  
8 FILE NUTRACEUT  
212 FILE OCEAN  
19324 FILE PASCAL

781	FILE PHAR
377	FILE PHARMAML
6	FILE PHIC
1124	FILE PHIN
41169	FILE PROMT
2333	FILE PROUSDDR
31	FILE RDISCLOSURE
36182	FILE SCISEARCH
57	FILE SYNTHLINE
22459	FILE TOXCENTER
14790	FILE USPATFULL
1064	FILE USPAT2
245	FILE VETU
119	FILE WATER
3187	FILE WPIDS
14	FILE WPIFV
3187	FILE WPINDEX

L1           QUE CYCLOOXYGENASE OR COX  
 -----

FILE 'PROMT, BIOSIS, MEDLINE, EMBASE, SCISEARCH, CAPLUS, TOXCENTER,  
 PASCAL, ESBIODBASE, DRUGU, CANCERLIT' ENTERED AT 10:50:40 ON 30 SEP 2004

L2	524 S L1 AND OSTEOSARCOMA
L3	5 S L2 AND (143.98.2)
L4	2 DUP REM L3 (3 DUPLICATES REMOVED)

=> d l4 ibib ab 1-2

L4 ANSWER 1 OF 2 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 97239482 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 9085144  
TITLE: Characterization of autocrine inducible prostaglandin H  
synthase-2 (PGHS-2) in human **osteosarcoma** cells.  
AUTHOR: Wong E; DeLuca C; Boily C; Charleson S; Cromlish W; Denis  
D; Kargman S; Kennedy B P; Ouellet M; Skorey K; O'Neill G  
P; Vickers P J; Riendeau D  
CORPORATE SOURCE: Department of Biochemistry and Molecular Biology, Merck  
Frosst Centre for Therapeutic Research,  
Pointe-Claire-Dorval, Quebec, Canada.  
SOURCE: Inflammation research : official journal of the European  
Histamine Research Society ... [et al.], (1997 Feb) 46 (2)  
51-9.  
Journal code: 9508160. ISSN: 1023-3830.  
PUB. COUNTRY: Switzerland  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
ENTRY MONTH: 199706  
ENTRY DATE: Entered STN: 19970620  
Last Updated on STN: 19970620  
Entered Medline: 19970612

AB The human **osteosarcoma** 143.98.2  
cell line was found to express high levels of prostaglandin synthase-2  
(PGHS-2) without detectable levels of prostaglandin synthase-1 (PGHS-1) as  
measured by reverse transcriptase-polymerase chain reaction (RT-PCR) and  
immunoblot analysis. Maximal levels of PGHS-2 induction were attained  
when the cells were grown beyond confluence. The **osteosarcoma**  
cells also secrete IL-1 alpha, IL-1 beta and TNF alpha in the culture  
medium. PGHS-2 expression was inducible by the exogenous addition of  
these cytokines as well as conditioned media from auto-induced cultures  
and inhibitable by treatment with dexamethasone. In contrast,  
undifferentiated U937 cells selectively express PGHS-1 as analyzed by  
RT-PCR and Western blotting. The effects of non-steroidal  
anti-inflammatory drugs (NSAIDs) on the cellular PGE2 production mediated  
by each isoform of human PGHS were determined using **osteosarcoma**  
and undifferentiated U937 cells. When cells were preincubated with  
inhibitors to allow time-dependent inhibition prior to arachidonic acid  
stimulation, NS-398, CGP 28238, L-745,337, SC-58125 all behaved as potent  
(IC50 = 1-30 nM) and selective inhibitors of PGHS-2, in contrast to  
indomethacin, flurbiprofen or diclofenac which are potent inhibitors of  
enzymes. DuP-697 and sulindac sulfide were also potent inhibitors of  
PGHS-2 but both compounds inhibited cellular PGHS-1 activity at higher  
doses (IC50 = 0.2-0.4 microm). Time-dependent inhibition of PGE2  
production in **osteosarcoma** cells was observed for indomethacin,  
diclofenac and etodolac. The synthesis of PGE2 by U937 cells was strongly  
dependent on exogenous arachidonic acid (100-fold stimulation) whereas  
confluent **osteosarcoma** cells also produced PGE2 without  
exogenous stimulus (7-fold stimulation by arachidonic acid).  
**Osteosarcoma** cells grown beyond confluence released more PGE2 from  
endogenous substrate than arachidonic acid stimulated undifferentiated  
U937 cells. These results indicate that **osteosarcoma** cells  
selectively express PGHS-2 with an autocrine regulation and effective  
utilization of endogenous arachidonic acid for PGE2 synthesis.

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
ACCESSION NUMBER: 1995:339482 CAPLUS  
DOCUMENT NUMBER: 122:105655  
TITLE: Preparation of 2-substituted-3,4-di(aryl)thiophene  
**cyclooxygenase** inhibitors

INVENTOR(S): Gauthier, Jacques Yves; Leblanc, Yves; Prasit,  
Petpiboon  
PATENT ASSIGNEE(S): Merck Frosst Canada Inc., Can.  
SOURCE: PCT Int. Appl., 42 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9426731	A1	19941124	WO 1994-CA264	19940511
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TT, UA, US, UZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2161789	AA	19941124	CA 1994-2161789	19940511
AU 9467184	A1	19941212	AU 1994-67184	19940511
PRIORITY APPLN. INFO.:			US 1993-61354	A 19930513
			WO 1994-CA264	W 19940511

OTHER SOURCE(S): MARPAT 122:105655

AB The title compds. [I; R1 = H, halogen, CN, NO2, CF3, C1-6 alkyl; R2 = C3-6 alkyl, (un)substituted Ph, (un)substituted heteroaryl; R3 = SO2CH3, S(O)(NH)CH3, SONH2, SO2NH2; R4 = H, halogen, CO2H, CF3], useful as **cyclooxygenase** inhibitors, are prepared and I-containing formulations claimed. Thus, 3-(4-fluorophenyl)-4-(4-sulfamoylphenyl)thiophene was prepared and demonstrated 95% inhibition of PGE2 formation by **osteosarcoma** (143.98.2) cells at 100 nM.



Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Book

Search PubMed for Go Clear

☒ Limits Preview/Index History Clipboard Details

Display Abstract Show: 20 Sort Send to Text

About Entrez

Text Version

☐ 1: Inflamm Res. 1997 Feb;46(2):51-9.

Related Articles, L

**Characterization of autocrine inducible prostaglandin H synthase-2 (PGH 2) in human osteosarcoma cells.****Wong E, DeLuca C, Boily C, Charleson S, Cromlish W, Denis D, Kargman S, Kennedy BP, Ouellet M, Skorey K, O'Neill GP, Vickers PJ, Riendeau D.**

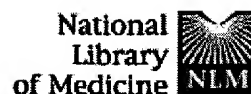
Department of Biochemistry and Molecular Biology, Merck Frosst Centre for Therapeutic Research, Pointe-Claire-Dorval, Quebec, Canada.

The human osteosarcoma 143.98.2 cell line was found to express high levels of prostaglandin synthase-2 (PGHS-2) without detectable levels of prostaglandin synthase-1 (PGHS-1) as measured by reverse transcriptase-polymerase chain reaction (RT-PCR) and immunoblot analysis. Maximal levels of PGHS-2 induction were attained when the cells were grown beyond confluence. The osteosarcoma cells also secrete IL-1 alpha, IL-1 beta and TNF alpha in the culture medium. PGHS-2 expression was inducible by the exogenous addition of these cytokines as well as conditioned media from auto-induced cultures and inhibitable by treatment with dexamethasone. In contrast, undifferentiated U937 cells selectively express PGHS-1 as analyzed by RT-PCR and Western blotting. The effects of non-steroidal anti-inflammatory drugs (NSAIDs) on the cellular PGE2 production media by each isoform of human PGHS were determined using osteosarcoma and undifferentiated U937 cells. When cells were preincubated with inhibitors to allow time-dependent inhibition prior to arachidonic acid stimulation, NS-398, CGP 28238, L-745,337, SC-58125 all behaved as potent ( $IC_{50} = 1-30$  nM) and selective inhibitors of PGHS-2, in contrast to indomethacin, flurbiprofen or diclofenac which are potent inhibitors of PGHS-1. DuP-697 and sulindac sulfide were also potent inhibitors of PGHS-2 but both compounds inhibited cellular PGHS-1 activity at higher doses ( $IC_{50} = 0.2-0.4$  microM). Time-dependent inhibition of PGE2 production in osteosarcoma cells was observed for indomethacin, diclofenac and etodolac. The synthesis of PGE2 by U937 cells was strongly dependent on exogenous arachidonic acid (100-fold stimulation) whereas confluent osteosarcoma cells also produced PGE2 without exogenous stimulus (7-fold stimulation arachidonic acid). Osteosarcoma cells grown beyond confluence released more PGE2 from endogenous substrate than arachidonic acid stimulated undifferentiated U937 cells. These results indicate that osteosarcoma cells selectively express PGHS-2 with an autocrine regulation and effective utilization of endogenous arachidonic acid for PGE2 synthesis.

PMID: 9085144 [PubMed - indexed for MEDLINE]

Display Abstract Show: 20 Sort Send to Text

Adonis



Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Book

Search PubMed for #1 AND #2 Preview Go Clear

☒ Limits Preview/Index History Clipboard Details

- Search History will be lost after eight hours of inactivity.
- To combine searches use # before search number, e.g., #2 AND #6.
- Search numbers may not be continuous; all searches are represented.
- Click on query # to add to strategy

About Entrez

Text Version

Entrez PubMed

Overview

Help | FAQ

Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

LinkOut

Cubby

Search	Most Recent Queries	Time	Res
<a href="#">#3</a>	Search #1 AND #2 Field: Title, Limits: Publication Date from 1970 to 1992	10:55:53	—
<a href="#">#4</a>	Search #1 AND #2 Field: Text Word, Limits: Publication Date from 1970 to 1992	10:55:41	—
<a href="#">#2</a>	Search osteosarcoma Field: Title, Limits: Publication Date from 1970 to 1992	10:55:02	<u>20</u>
<a href="#">#1</a>	Search cyclooxygenase OR COX Field: Title, Limits: Publication Date from 1970 to 1992	10:54:39	<u>8</u>

Clear History

Related Resources

Order Documents

NLM Catalog

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)



Entrez PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Book

Search PubMed for #1 AND #2

☒ Limits Preview/Index History Clipboard Details

No items found.

Field: Title, Limits: Publication Date from 1970 to 1992

About Entrez

Text Version

#### Entrez PubMed

Overview  
Help | FAQ  
Tutorial  
New/Noteworthy  
E-Utilities

#### PubMed Services

Journals Database  
MeSH Database  
Single Citation Matcher  
Batch Citation Matcher  
Clinical Queries  
LinkOut  
Cubby

#### Related Resources

Order Documents  
NLM Catalog  
NLM Gateway  
TOXNET  
Consumer Health  
Clinical Alerts  
ClinicalTrials.gov  
PubMed Central

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)

Sep 21 2004 15: